



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,770	03/28/2006	Kimmo Laiho	915-002.010	3998

4955 7590 06/27/2008

WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP  
BRADFORD GREEN, BUILDING 5  
755 MAIN STREET, P O BOX 224  
MONROE, CT 06468

EXAMINER

GUZMAN, APRIL S

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

06/27/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/573,770

**Applicant(s)**

LAIHO ET AL.

**Examiner**

APRIL S. GUZMAN

**Art Unit**

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 March 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-31 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 28 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-850)  
Paper No(s)/Mail Date 3/28/06, 5/15/06, 5/7/07, 7/5/07  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments, with respect to the rejection(s) of claim(s) 1-31 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of **Friesen et al. (U.S. Patent # 6,892,080)** as modified by **Tendler (U.S. Patent Application Publication # 2002/0068549 A1)**.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(c), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 1-14 and 16-31** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Friesen et al. (U.S. Patent # 6,892,080)** herein referred to as Friesen, and further in view of **Tendler (U.S. Patent Application Publication # 2002/0068549 A1)**.

Consider **claim 1**, Friesen teach a device comprising:

an interface (read as cradle 2) adapted to receive a signal received via an antenna (read as antenna 10) (column 4 lines 23-36); and

a loop or coil configured to couple inductively with a corresponding loop or coil included in a mobile terminal (read as telephone handset 1) so as to transmit the signal to the mobile terminal (read as cradle may have a direct RF connection to the handset or it may be inductively coupled) (column 4 lines 23-50).

However, Friesen fail to teach a digital broadcast.

In the related art, Tendler teach a digital broadcast (read as GPS satellite signals) ([0010], [0025]-[0026], [0029], [0039], and claim 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Tendler into the teachings of Friesen for the purpose of accommodating users of phones for transmitting information as to the location of certain services in which the phone includes a GPS receiver with the phone, the phone being carried in a handsfree cradle.

Consider **claim 2, as applied to claim 1 above**, Friesen as modified by Tendler further teach an amplifier (read as amplifier 6) adapted to amplify the signal (Friesen - Figure 1, Figure 2, column 4 lines 36-50, and column 5 lines 1-6).

Consider **claim 3, as applied to claim 2 above**, Friesen as modified by Tendler further teach wherein: said amplifier is adapted to be powered by the mobile terminal (Friesen - Figure 1, Figure 2, and column 4 lines 36-50).

Consider **claim 4, as applied to claim 2 above**, Friesen as modified by Tendler further teach wherein: said amplifier adapted to be controlled by the mobile terminal (Friesen - Figure 2, column 5 lines 56-67, column 6 lines 1-5, and column 6 lines 11-38).

Consider **claim 5, as applied to claim 4 above**, Friesen as modified by Tendler further teach wherein: said amplifier is adapted to intermittently operate under control of the mobile terminal (Friesen - Figure 2, column 6 lines 11-38, and column 7 lines 20-37).

Consider **claim 6, as applied to claim 2 above**, Friesen as modified by Tendler further teach comprising:

a detector adapted to determine a position of the mobile terminal (Friesen - Figure 2, Figure 4, Figure 5, column 5 lines 14-55, and column 6 lines 11-38; Tendler - [0032]-[0035], and claim 1); and

a controller adapted to control operation of said amplifier in dependence upon the position of the mobile terminal (Friesen - Figure 2, Figure 4, Figure 5, column 5 lines 14-55, and column 6 lines 11-38).

Consider **claim 7, as applied to claim 6 above**, Friesen as modified by Tendler further teach wherein: the detector comprises a switch to determine whether the mobile terminal is

attached to the extension device (Friesen – Figure 2, Figure 4, Figure 5, column 5 lines 14-55, and column 6 lines 11-38; Tendler – [0045]-[0048]).

Consider **claim 8, as applied to claim 6 above**, Friesen as modified by Tendler further teach wherein: the detector comprises a sensor adapted to determine whether the mobile terminal is located within a predetermined distance of the extension device (Friesen – Figure 2, Figure 4, Figure 5, column 5 lines 14-55, and column 6 lines 11-38).

Consider **claim 9, as applied to claim 6 above**, Friesen as modified by Tendler further teach wherein: the controller is adapted to cause the amplifier to reduce gain when the mobile terminal is in a given position (Friesen – Figure 2, Figure 4, Figure 5, column 5 lines 14-55, and column 6 lines 11-38).

Consider **claim 10, as applied to claim 6 above**, Friesen as modified by Tendler further teach wherein: the controller is adapted to cause the amplifier to be by-passed when the mobile terminal is in a given position (Friesen – Figure 2, Figure 4, Figure 5, column 6 lines 11-38, and column 7 lines 20-37).

Consider **claim 11, as applied to claim 6 above**, Friesen as modified by Tendler further teach comprising:

an antenna for receiving an amplified signal from the amplifier and radiatively transmitting the amplified signal to the mobile terminal (Friesen – column 4 lines 63-67, and column 5 lines 1-6); wherein

the controller is adapted to cause the signal to be routed to the loop or coil when the mobile terminal is in a given position and to be routed to the amplifier when not (Friesen - column 4 lines 51-67, column 5 lines 1-6, and column 6 lines 11-28).

Consider **claim 12, as applied to claim 1 above**, Friesen as modified by Tendler further teach a filter adapted to obtain said signal from at least one other signal (Friesen - Figure 2, column 4 lines 51-67, and column 5 lines 1-14).

Consider **claim 13, as applied to claim 1 above**, Friesen as modified by Tendler further teach comprising:

input for receiving power from an external source (Tendler – [0026], , and [0043]); and  
a path adapted to deliver power to the mobile terminal to permit recharging of a rechargeable battery (read as phone battery 26) included in the mobile terminal (Tendler – [0026], and [0043]).

Consider **claim 14, as applied to claim 1 above**, Friesen as modified by Tendler further teach wherein the loop or coil is a loop and the loop is arranged substantially around a perimeter of a face of the device (Friesen – Figure 1; Tendler - Figure 1, Figure 2).

Consider **claim 16, as applied to claim 1 above**, Friesen as modified by Tendler further teach which is adapted to be placed on a piece of furniture (Friesen – column 4 lines 23-36; Tendler – [0025]-[0027]).

Consider **claim 17, as applied to claim 1 above**, Friesen as modified by Tendler further teach an antenna mounted on a roof or to an externally facing side of an external wall of a building (Friesen – column 4 lines 23-36; Tendler – [0025]-[0027]).

Consider **claim 18**, Friesen teach device comprising:

means for receiving a signal received via an antenna (read as antenna 10) (column 4 lines 23-36); and

inductive coupling means configured to couple inductively with a corresponding inductive coupling means included in a mobile terminal so as to transmit the signal to the mobile terminal (read as cradle may have a direct RF connection to the handset or it may be inductively coupled) (column 4 lines 23-50).

However, Friesen fail to teach a digital broadcast.

In the related art, Tendler teach a digital broadcast (read as GPS satellite signals) ([0010], [0025]-[0026], [0029], [0039], and claim 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Tendler into the teachings of Friesen for the purpose of accommodating users of phones for transmitting information as to the location of certain services in which the phone includes a GPS receiver with the phone, the phone being carried in a handsfree cradle.

Consider **claim 19, as applied to claim 1 above**, Friesen as modified by Tendler further teach apparatus comprising: a mobile terminal including a loop or coil for receiving the signal from the device (Tendler – [0025]-[0026]).

Consider **claim 20, as applied to claim 19 above**, Friesen as modified by Tendler further teach wherein the device further comprises an amplifier arranged to amplify the signal (Friesen - Figure 1, Figure 2, column 4 lines 36-50, and column 5 lines 1-6).

Consider **claim 21, as applied to claim 20 above**, Friesen as modified by Tendler further teach wherein the mobile terminal is configured to cause said amplifier to operate when reception of a time slice is expected (Friesen – column 3 lines 34-37, and column 7 lines 20-37).

Consider **claim 22**, Friesen teach a method comprising:



receiving a signal (column 4 lines 23-36); and  
providing said signal to a loop or coil configured to couple inductively with a  
corresponding loop or coil included in a mobile terminal so as to transmit the signal to the  
mobile terminal (read as cradle may have a direct RF connection to the handset or it may be  
inductively coupled) (column 4 lines 23-50).

However, Friesen fail to teach a digital broadcast.

In the related art, Tendler teach a digital broadcast (read as GPS satellite signals) ([0010],  
[0025]-[0026], [0029], [0039], and claim 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the  
invention was made to incorporate the teachings of Tendler into the teachings of Friesen for the  
purpose of accommodating users of phones for transmitting information as to the location of  
certain services in which the phone includes a GPS receiver with the phone, the phone being  
carried in a handsfree cradle.

Consider **claim 23, as applied to claim 22 above**, Friesen as modified by Tendler further  
teach amplifying the signal (Friesen - Figure 1, Figure 2, column 4 lines 36-50, and column 5  
lines 1-6).

Consider **claim 24, as applied to claim 22 above**, Friesen as modified by Tendler further  
teach intermittently operating an amplifier adapted to amplify the signal under the control of the  
mobile terminal (Friesen - Figure 2, column 5 lines 56-67, column 6 lines 1-5, and column 6  
lines 11-38).

Consider **claim 25, as applied to claim 22 above**, Friesen as modified by Tendler further  
detecting a position of the mobile terminal; and controlling operation of an amplifier in

dependence upon the position of the mobile terminal (Friesen - Figure 2, Figure 4, Figure 5, column 5 lines 14-55, and column 6 lines 11-38).

Consider **claim 26, as applied to claim 25 above**, Friesen as modified by Tendler further teach detecting whether the mobile terminal is attached to the extension device (Friesen - Figure 2, Figure 4, Figure 5, column 5 lines 14-55, and column 6 lines 11-38).

Consider **claim 27, as applied to claim 25 above**, Friesen as modified by Tendler further teach sensing whether the mobile terminal is attached to the extension device (Friesen - Figure 2, Figure 4, Figure 5, column 5 lines 14-55, and column 6 lines 11-38).

Consider **claim 28, as applied to claim 25 above**, Friesen as modified by Tendler further teach reducing gain when the mobile terminal is in a given position (Friesen - Figure 2, Figure 4, Figure 5, column 5 lines 14-55, and column 6 lines 11-38).

Consider **claim 29, as applied to claim 25 above**, Friesen as modified by Tendler further teach by-passing the amplifier when the mobile terminal is in a given position (Friesen - Figure 2, figure 4, Figure 5, column 6 lines 11-38, and column 7 lines 20-37).

Consider **claim 30, as applied to claim 22 above**, Friesen as modified by Tendler further teach routing the signal to the loop or coil when the mobile terminal is within a given range (Friesen - column 4 lines 63-67, and column 5 lines 1-6);

routing the signal to an amplifier when the mobile terminal is outside the given range (Friesen - column 4 lines 51-67, column 5 lines 1-6, and column 6 lines 11-28).

Consider **claim 31, as applied to claim 30 above**, Friesen as modified by Tendler further teach radiatively transmitting an amplified signal output from the amplifier (Friesen - column 4 lines 63-67, and column 5 lines 1-6).

**Claim 15** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Friesen et al.** (U.S. Patent # 6,892,080).

Consider **claim 15, as applied to claim 1 above**, Friesen as modified by Tendler teach the loop or coil except for the specific area of the loop or coil of between 10 and 50 cm<sup>2</sup>.

Nonetheless, to the extent that Friesen as modified by Tendler does not specify the exact range of the area of the loop or coil, this figure would have been a matter of routine experimentation to one of ordinary skill in the art at the time the invention was made in order to couple signals from an outside antenna to a portable device with transmits signals inductively via loop or coil. See *In re Aller*, 105 USPQ 233 (CCPA 1995) (Where general conditions of the claim are disclosed in the prior art, it is not inventive to discover optimal or workable ranges by routine experimentation).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: see PTO-892 Notice of References Cited.

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to April S. Guzman whose telephone number is 571-270-1101. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April S. Guzman  
A.S.G/asg

/April S. Guzman/  
Examiner, Art Unit 2618

/Matthew D. Anderson/  
Supervisory Patent Examiner, Art Unit 2618